

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (currently amended): A process for producing a cold-rolled ferritic/martensitic dual-phase steel strip, wherein a slab, the chemical composition of which comprises, by weight:

$$0.010\% \leq C \leq 100\%$$

$$0.050\% \leq Mn \leq 1.0\%$$

$$0.010\% \leq Cr \leq 1.0\%$$

$$0.010\% \leq Si \leq 0.50\%$$

$$0.001\% \leq P \leq 0.20\%$$

$$0.010\% \leq Al \leq 0.10\%$$

$$N \leq 0.010\%$$

the balance being iron and impurities resulting from the smelting, is hot rolled, said process then comprising ~~the steps consisting in:~~

- coiling the hot-rolled strip obtained at a temperature of between 550 and 850°C;
- then
- cold rolling the strip with a reduction ratio of between 60 and 90%; then
 - annealing the strip continuously in the intercritical range; and
 - cooling it down to the ambient temperature in one or more steps, the cooling rate between 600°C and the ambient temperature being between 100°C/s and 1500°C/s; and
- optionally tempering it at a temperature below 300°C,

the annealing and cooling operations being carried out in such a way that the strip finally contains from 1 to 15% martensite.

2. (original): The process as claimed in claim 1, wherein the chemical composition of the steel comprises:

$$0.020\% \leq C \leq 0.060\%$$

$$0.300\% \leq Mn \leq 0.500\%$$

$$0.010\% \leq Cr \leq 1.0\%$$

$$0.010\% \leq Si \leq 0.50\%$$

$$0.010\% \leq P \leq 0.100\%$$

$$0.010\% \leq Al \leq 0.10\%$$

$$N \leq 0.010\%$$

the balance being iron and impurities resulting from the smelting.

3. (currently amended): The process as claimed in ~~either of claims 1 and 2~~claim 1, wherein the strip is hot rolled at a temperature above 850°C.

4. (currently amended): The process as claimed in ~~any one of claims 1 to 3~~claim 1, wherein the strip is hot rolled at a temperature of between 550 and 750°C.

5. (currently amended): The process as claimed in ~~any one of claims 1 to 4~~claim 1, wherein the strip is cold rolled with a reduction ratio of between 70 and 80%.

6. (currently amended): The process as claimed in ~~any one of claims 1 to 5~~claim 1, wherein the continuous annealing of the cold-rolled strip comprises a temperature rise phase followed by a soak phase at a predetermined temperature.

7. (original): The process as claimed in claim 6, wherein the soak temperature is between A_{c1} and 900°C .

8. (original): The process as claimed in claim 7, wherein the soak temperature is between 750 and 850°C .

9. (currently amended): The process as claimed in ~~any one of claims 1 to 8~~claim 1, wherein the cooling down to the ambient temperature comprises a first, slow cooling step between the soak temperature and 600°C , during which the cooling rate is less than 50°C/s , followed by a second cooling step at a higher rate, of between 100°C/s and 1500°C/s , down to the ambient temperature.

10. (original): The process as claimed in claim 9, wherein the second cooling step is carried out by water quenching.

11. (currently amended): The process as claimed in ~~any one of claims 1 to 8~~claim 1, wherein the cooling is carried out in a single operation at a cooling rate of between 100°C/s and

1500°C/s.

12. (original): The process as claimed in claim 11, wherein the cooling is carried out by water quenching.

13. (withdrawn): A cold-rolled ferritic/martensitic dual-phase steel strip, the chemical composition of which comprises, by weight:

$$0.010\% \leq C \leq 100\%$$

$$0.050\% \leq \text{Mn} \leq 1.0\%$$

$$0.010\% \leq \text{Cr} \leq 1.0\%$$

$$0.010\% \leq \text{Si} \leq 0.50\%$$

$$0.001\% \leq \text{P} \leq 0.20\%$$

$$0.010\% \leq \text{Al} \leq 0.10\%$$

$$\text{N} \leq 0.010\%$$

the balance being iron and impurities resulting from the smelting, the strip furthermore containing between 1% and 15% martensite.

14. (withdrawn): The steel strip as claimed in claim 13, the chemical composition of which furthermore comprises:

$$0.020\% \leq C \leq 0.060\%$$

$$0.300\% \leq \text{Mn} \leq 0.500\%$$

$$0.010\% \leq \text{Cr} \leq 1.0\%$$

$$0.010\% \leq \text{Si} \leq 0.50\%$$

$$0.010\% \leq \text{P} \leq 0.100\%$$

$$0.010\% \leq \text{Al} \leq 0.10\%$$

$$\text{N} \leq 0.010\%$$

the balance being iron and impurities resulting from the smelting.

15. (withdrawn): The steel strip as claimed in either of claims 13 and 14, which has a tensile strength R_m of greater than 450 MPa.

16. (withdrawn): The steel strip as claimed in claim 15, which has a tensile strength R_m of greater than 500 MPa.

17. (withdrawn): The steel strip as claimed in claim 16, further which has a tensile strength R_m of greater than 600 MPa.

18. (withdrawn): The steel strip as claimed in any one of claims 13 to 17, which has a mean anisotropy coefficient r of greater than 1.1.

19. (withdrawn): The steel strip as claimed in claim 18, further which has a mean anisotropy coefficient r of greater than 1.3.

20. (withdrawn): The steel strip as claimed in any one of claims 13 to 19, which

furthermore contains between 1% and 10% martensite.

21. (withdrawn): The steel strip as claimed in claim 20, which furthermore contains between 5% and 8% martensite.

22. (withdrawn): The use of a steel strip as claimed in any one of claims 13 to 21 for the production of automobile parts by deep drawing.